

# **METHOD AND APPARATUS TO FACILITATE AUTO-ALIGNMENT OF IMAGES FOR DEFECT INSPECTION AND DEFECT ANALYSIS**

## **ABSTRACT**

One embodiment of the invention provides a system that facilitates auto-alignment of images for defect inspection and defect analysis. The system operates by first receiving a reference image and a test image. Next, the system creates a horizontal cut line across the reference image and chooses a vertical feature on the reference image with a specified width along the horizontal cut line. The system also creates a vertical cut line across the reference image and chooses a horizontal feature on the reference image with the specified width along the vertical cut line. Finally, the system locates the vertical feature and the horizontal feature on the test image so that the reference image and the test image can be aligned to perform defect inspection and defect analysis.